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1600

RAW SEQUENCE LISTING

DATE: 03/25/2003

PATENT APPLICATION: US/09/905,114A

TIME: 12:54:15

Input Set : A:\210707US.txt

Output Set: N:\CRF4\03252003\I905114A.raw

3 <110> APPLICANT: ZHANG, HUANMIN
 4 AX, ROY L
 5 BELLIN, MARY E
 7 <120> TITLE OF INVENTION: ISOLATED POLYNUCLEOTIDE SEQUENCES ENCODING A FERTILITY
 ASSOCIATED ANTIGEN

9 <130> FILE REFERENCE: 210707US20
 11 <140> CURRENT APPLICATION NUMBER: 09/905,114A
 12 <141> CURRENT FILING DATE: 2001-07-16
 14 <150> PRIOR APPLICATION NUMBER: US 60/218,140
 15 <151> PRIOR FILING DATE: 2000-07-14
 17 <160> NUMBER OF SEQ ID NOS: 10
 19 <170> SOFTWARE: PatentIn version 3.1
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 592
 23 <212> TYPE: DNA
 24 <213> ORGANISM: Bos sp.
 26 <220> FEATURE:
 27 <221> NAME/KEY: CDS
 28 <222> LOCATION: (1)..(591)
 29 <223> OTHER INFORMATION:

ENTERED

W--> 31 <400> 1
 32 gag aag cta aac gga aat tca aga aaa ggc ata aca tac aac tat gtg 48
 33 Glu Lys Leu Asn Gly Asn Ser Arg Lys Gly Ile Thr Tyr Asn Tyr Val
 34 1 5 10 15
 36 att agc tct cgc ctt gga aga aac aca tat aaa gaa cag tat gcc ttt 96
 37 Ile Ser Ser Arg Leu Gly Arg Asn Thr Tyr Lys Glu Gln Tyr Ala Phe
 38 20 25 30
 40 ctc tat aaa gaa aag cta gtg tct gta aaa caa agc tac ctc tac cac 144
 41 Leu Tyr Lys Glu Lys Leu Val Ser Val Lys Gln Ser Tyr Leu Tyr His
 42 35 40 45
 44 gac tat cag gct gga gac gca gat gtg ttt tcc agg gaa ccc ttt gtg 192
 45 Asp Tyr Gln Ala Gly Asp Ala Asp Val Phe Ser Arg Glu Pro Phe Val
 46 50 55 60
 48 gtc tgg ttc cag tca ccc tac acc gct gtc aag gac ttc gtg att gtc 240
 49 Val Trp Phe Gln Ser Pro Tyr Thr Ala Val Lys Asp Phe Val Ile Val
 50 65 70 75 80
 52 ccc ctg cac acc acc cct gag aca tcc gtt aga gag att gat gag ctg 288
 53 Pro Leu His Thr Thr Pro Glu Thr Ser Val Arg Glu Ile Asp Glu Leu
 54 85 90 95
 56 gct gat gtc tac aca gat gtg aaa cgt cgc tgg aat gca gag aat ttc 336
 57 Ala Asp Val Tyr Thr Asp Val Lys Arg Arg Trp Asn Ala Glu Asn Phe
 58 100 105 110
 60 att ttc atg ggt gac ttc aat gct ggc tgc agc tac gtc ccc aag aag 384
 61 Ile Phe Met Gly Asp Phe Asn Ala Gly Cys Ser Tyr Val Pro Lys Lys

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62          115          120          125
64 gcc tgg aag gac atc cgc ctg agg acg gac ccc aag ttc gtt tgg ctg      432
65 Ala Trp Lys Asp Ile Arg Leu Arg Thr Asp Pro Lys Phe Val Trp Leu
66          130          135          140
68 atc ggg gac caa gag gac acc acg gtc aag aag agc aca aac tgc gcc      480
69 Ile Gly Asp Gln Glu Asp Thr Thr Val Lys Lys Ser Thr Asn Cys Ala
70 145          150          155          160
72 tat gac agg atc gtg ctt aga gga caa aat att gtc aac tct ggt ggt      528
73 Tyr Asp Arg Ile Val Leu Arg Gly Gln Asn Ile Val Asn Ser Gly Gly
74          165          170          175
76 cct caa tca aac ctc gtc ttt gat ttc cag aaa gct tac agg ttg tct      576
77 Pro Gln Ser Asn Leu Val Phe Asp Phe Gln Lys Ala Tyr Arg Leu Ser
78          180          185          190
80 gaa tcg aag gcc ctg g      592
81 Glu Ser Lys Ala Leu
82          195
85 <210> SEQ ID NO: 2
86 <211> LENGTH: 197
87 <212> TYPE: PRT
88 <213> ORGANISM: Bos sp.
90 <400> SEQUENCE: 2
92 Glu Lys Leu Asn Gly Asn Ser Arg Lys Gly Ile Thr Tyr Asn Tyr Val
93 1          5          10          15
96 Ile Ser Ser Arg Leu Gly Arg Asn Thr Tyr Lys Glu Gln Tyr Ala Phe
97          20          25          30
100 Leu Tyr Lys Glu Lys Leu Val Ser Val Lys Gln Ser Tyr Leu Tyr His
101          35          40          45
104 Asp Tyr Gln Ala Gly Asp Ala Asp Val Phe Ser Arg Glu Pro Phe Val
105          50          55          60
108 Val Trp Phe Gln Ser Pro Tyr Thr Ala Val Lys Asp Phe Val Ile Val
109 65          70          75          80
112 Pro Leu His Thr Thr Pro Glu Thr Ser Val Arg Glu Ile Asp Glu Leu
113          85          90          95
116 Ala Asp Val Tyr Thr Asp Val Lys Arg Arg Trp Asn Ala Glu Asn Phe
117          100          105          110
120 Ile Phe Met Gly Asp Phe Asn Ala Gly Cys Ser Tyr Val Pro Lys Lys
121          115          120          125
124 Ala Trp Lys Asp Ile Arg Leu Arg Thr Asp Pro Lys Phe Val Trp Leu
125          130          135          140
128 Ile Gly Asp Gln Glu Asp Thr Thr Val Lys Lys Ser Thr Asn Cys Ala
129 145          150          155          160
132 Tyr Asp Arg Ile Val Leu Arg Gly Gln Asn Ile Val Asn Ser Gly Gly
133          165          170          175
136 Pro Gln Ser Asn Leu Val Phe Asp Phe Gln Lys Ala Tyr Arg Leu Ser
137          180          185          190
140 Glu Ser Lys Ala Leu
141          195
144 <210> SEQ ID NO: 3
145 <211> LENGTH: 671

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```

146 <212> TYPE: DNA
147 <213> ORGANISM: Bos sp.
149 <400> SEQUENCE: 3
150 acaacaggat ctgccccata ctgatggaga agctaaacgg aaattcaaga aaaggcataa      60
152 catacaacta tgtgattagc tctcgccctg gaagaaacac atataaagaa cagtatgcct      120
154 ttctctataa agaaaagcta gtgtctgtaa aacaaagcta cctctaccac gactatcagg      180
156 ctggagacgc agatgtgttt tccagggaac cctttgtggt ctggttccag tcaccctaca      240
158 ccgctgtcaa ggacttcgtg attgtccccc tgcacaccac ccctgagaca tccgttagag      300
160 agattgatga gctggctgat gtctacacag atgtgaaacg tcgctggaat gcagagaatt      360
162 tcattttcat gggtgacttc aatgctggct gcagctacgt cccaagaag gcctggaagg      420
164 acatccgcct gaggacggac cccaagttcg tttggctgat cggggaccaa gaggacacca      480
166 cggtaagaa gagcacaacac tgcgcctatg acaggatcgt gcttagagga caaaatattg      540
168 tcaactctgg tggtcctcaa tcaaacctcg tctttgattt ccagaaagct tacaggttgt      600
170 ctgaatcgaa ggccctggat gtcagcgacc actttccagt tcatcatcat catcatcatg      660
172 aagaaccatg a                                         671
175 <210> SEQ ID NO: 4
176 <211> LENGTH: 21
177 <212> TYPE: DNA
178 <213> ORGANISM: Artificial Sequence
180 <220> FEATURE:
181 <223> OTHER INFORMATION: synthetic DNA
183 <400> SEQUENCE: 4
184 cgtgaggagc ttcggcgaga g                                         21
187 <210> SEQ ID NO: 5
188 <211> LENGTH: 26
189 <212> TYPE: PRT
190 <213> ORGANISM: Bos sp.
192 <220> FEATURE:
193 <221> NAME/KEY: misc_feature
194 <222> LOCATION: (4)..(4)
195 <223> OTHER INFORMATION: Xaa is any amino acid
198 <400> SEQUENCE: 5
W--> 200 Leu Lys Ile Xaa Ser Phe Asn Val Arg Ser Phe Gly Glu Ser Lys Lys
201 1          5          10          15
204 Ala Gly Phe Asn Ala Met Arg Val Ile Val
205          20          25
208 <210> SEQ ID NO: 6
209 <211> LENGTH: 26
210 <212> TYPE: DNA
211 <213> ORGANISM: Artificial Sequence
213 <220> FEATURE:
214 <223> OTHER INFORMATION: synthetic DNA
216 <400> SEQUENCE: 6
217 acaacaggat ctgccccata ctgatg                                         26
220 <210> SEQ ID NO: 7
221 <211> LENGTH: 25
222 <212> TYPE: DNA
223 <213> ORGANISM: Artificial Sequence
225 <220> FEATURE:

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226 <223> OTHER INFORMATION: synthetic DNA.
228 <400> SEQUENCE: 7
229 tcaactggaa agtggtcgct gacat 25
232 <210> SEQ ID NO: 8
233 <211> LENGTH: 27
234 <212> TYPE: DNA
235 <213> ORGANISM: Artificial Sequence
237 <220> FEATURE:
238 <223> OTHER INFORMATION: synthetic DNA
240 <400> SEQUENCE: 8
241 acaacaggat ctgccccata ctgatgg 27
244 <210> SEQ ID NO: 9
245 <211> LENGTH: 57
246 <212> TYPE: DNA
247 <213> ORGANISM: Artificial Sequence
249 <220> FEATURE:
250 <223> OTHER INFORMATION: synthetic DNA
252 <400> SEQUENCE: 9
253 tcatggttct tcatgatgat gatgatgatg aactggaaag tggtcgctga catccag 57
256 <210> SEQ ID NO: 10
257 <211> LENGTH: 22
258 <212> TYPE: DNA
259 <213> ORGANISM: Artificial Sequence
261 <220> FEATURE:
262 <223> OTHER INFORMATION: synthetic DNA
264 <400> SEQUENCE: 10
265 ggccacgcgt cgactagtag tt 22

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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 03/25/2003
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; Xaa Pos. 4

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 7

VERIFICATION SUMMARY

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L:31 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:29

L:200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0